

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	14483427			
Catalog # :	02018OT3H256JM-W40			
Frame : 254/6JM Output : 20 HP (15 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 19.3 A L. R. Amperes : 123 A LRC : 6.4x(Code G) No load current : 8.00 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 59.3 ft.lb Locked rotor torque : 220 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 3.13 sq.ft.lb Design : B	Locked rotor time : 46s (cold) 26s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP23 Cooling method : IC01 - ODP Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 62.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 303 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	92.2    92.4    93.0    93.0			
Power Factor	0.43    0.69    0.79    0.84			
Foundation loads				
Max. traction				
Max. compression				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6209 Z C3			
Sealing	: Without Bearing Seal    Without Bearing Seal			
Lubrication interval	: 20000 h    20000 h			
Lubricant amount	: 13 g    9 g			
Lubricant type	: Mobil Polyrex EM			
Notes				
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.				
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.				
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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



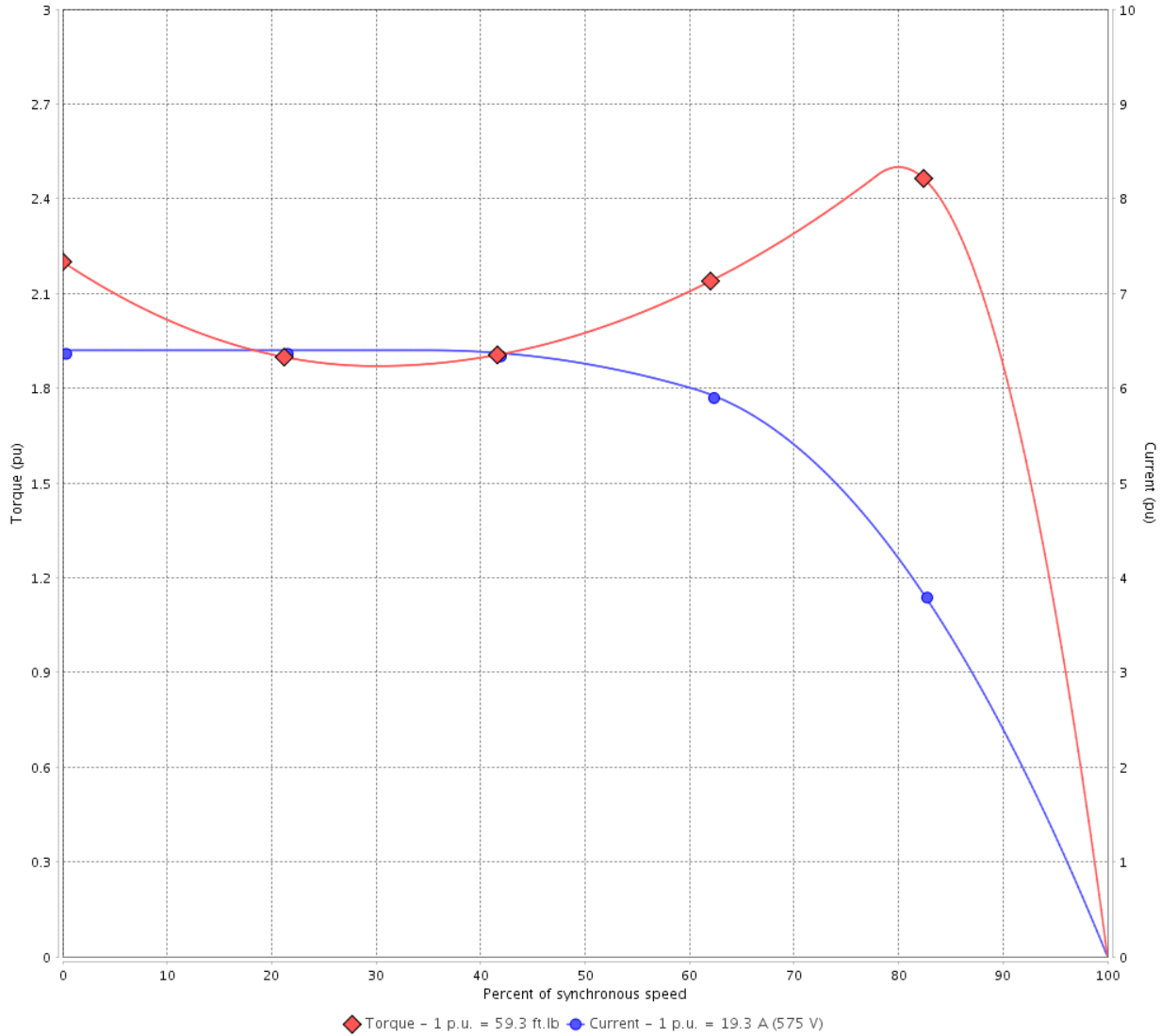
Customer :

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Product code : 14483427

Catalog # : 02018OT3H256JM-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 19.3 A	Moment of inertia (J)	: 3.13 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 59.3 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

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# LOAD PERFORMANCE CURVE

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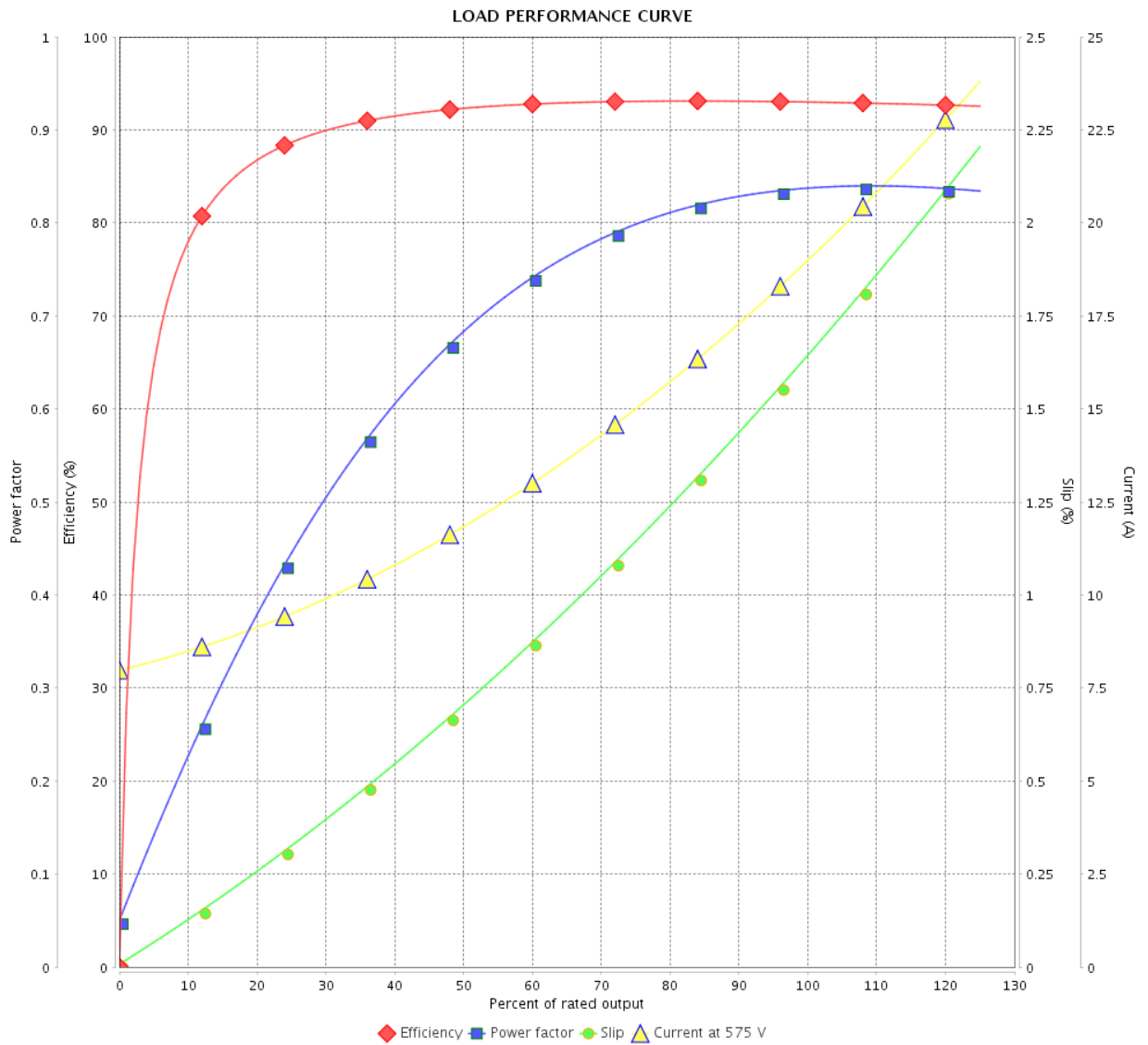


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Efficiency Three-Phase

Product code : 14483427

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Performance : 575 V 60 Hz 4P

Rated current : 19.3 A  
 LRC : 6.4  
 Rated torque : 59.3 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 3.13 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Locked rotor torque : 220 %  
Breakdown torque : 250 %  
Rated speed : 1770 rpm

Moment of inertia (J) : 3.13 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

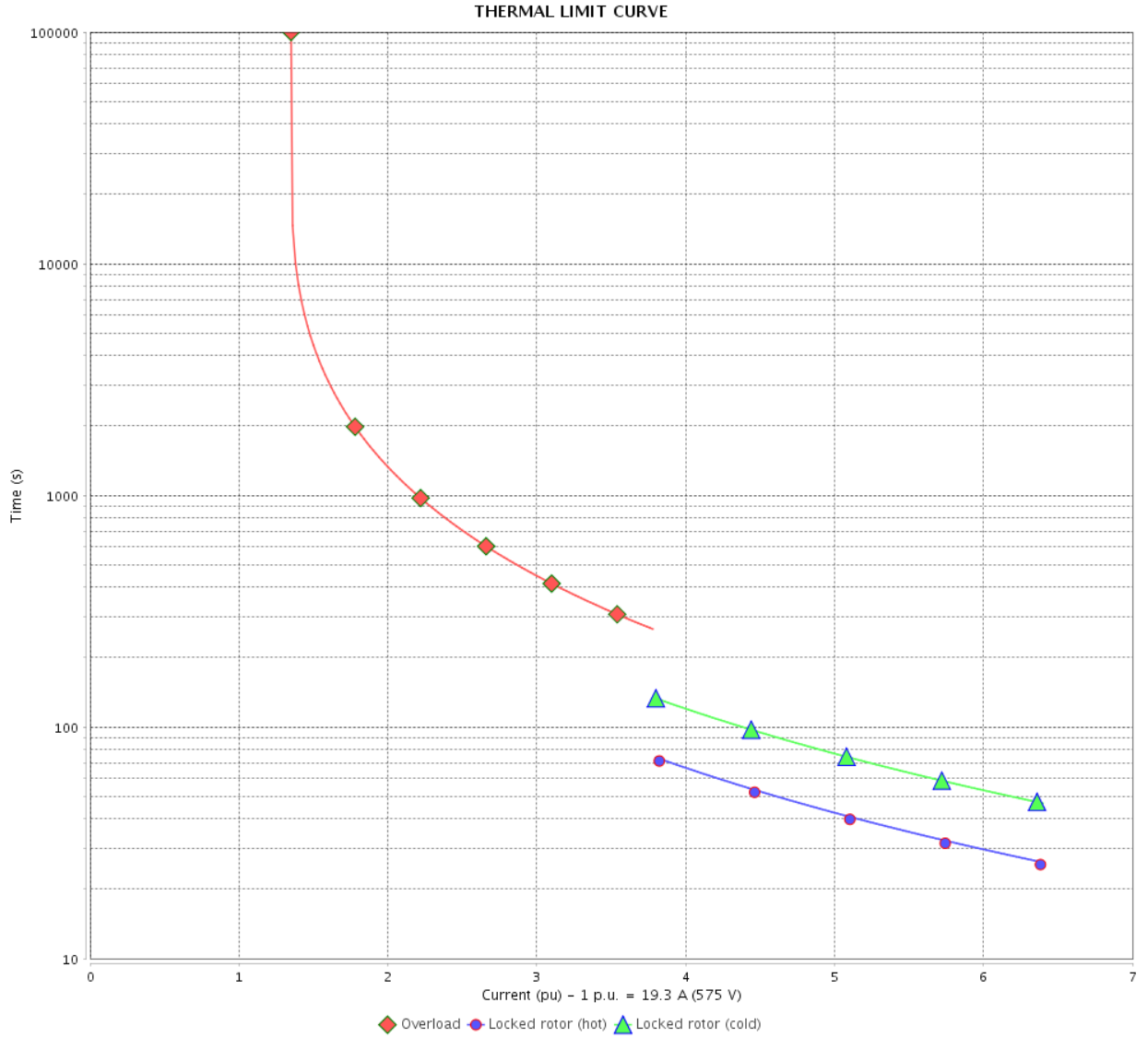
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



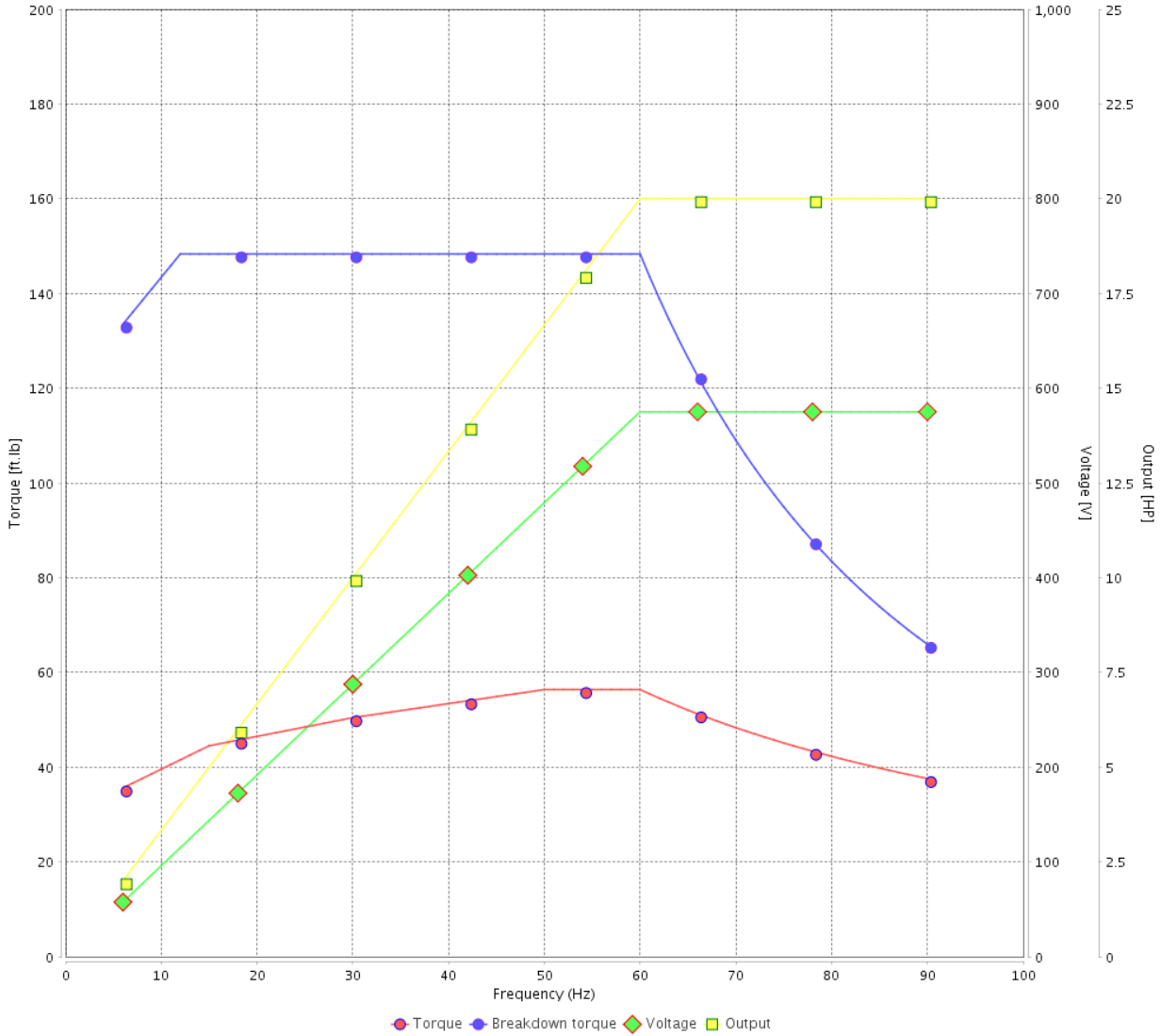
Customer : \_\_\_\_\_

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14483427

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VFD OPERATION CURVE

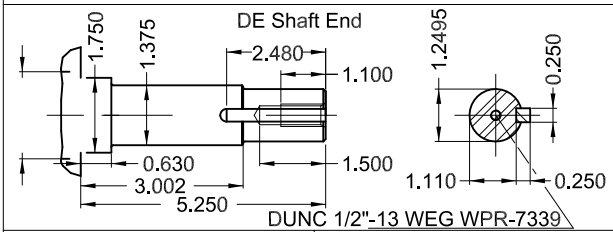
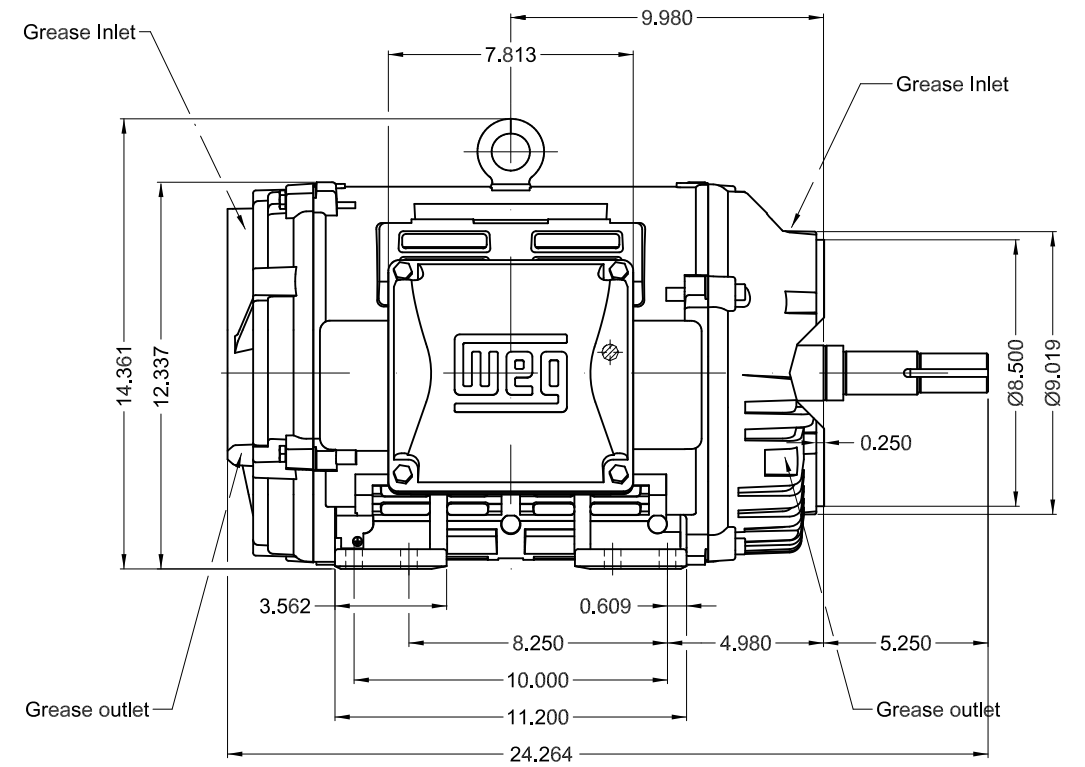
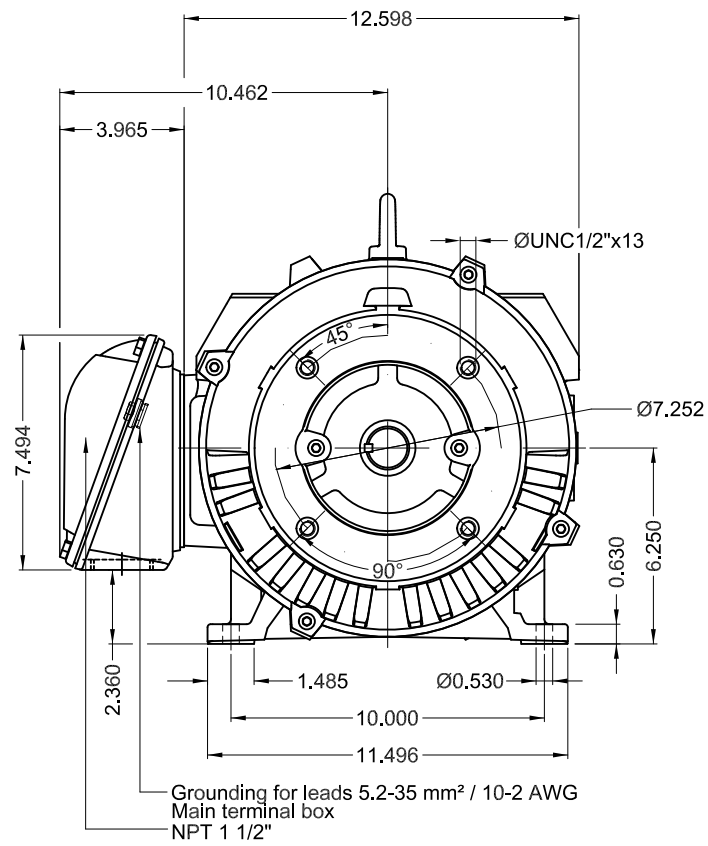


Performance : 575 V 60 Hz 4P

Rated current : 19.3 A  
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20 HP 04 Poles 60 Hz

A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE PREM-EST.					
CHECKED		FRAME 254/6JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

Color RAL 5009  
 Painting plan 203A  
 Mounting NEMA F-1  
 Mounting B34R(D)

**PREVIEW**  
 WDD



MODEL 020180T3H256JM-W40  
MADE IN BRAZIL  
14483427

**WEG** **W40 NEMA**  
**CC029A Premium**  
*Inverter Duty Motor*

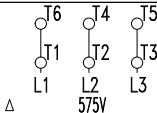


IEC 60034-1  
MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 3:1, 1.0SF

PH 3	FR 254/6JM	HP(kW) 20(15)		Hz 60
V 575		A 19.3		IP23
NEMA NOM EFF		93.0	%	RPM 1770
ENCL ODP	DUTY CONT.		INS. CL. F $\Delta$ T 80 K	
PF 0.84		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 24.1		ALT 1000 m.a.s.l.



→ 6309-Z-C3  
→ 6209-Z-C3

MOBIL POLYREX EM  
13 g 20000 h

282 Lbs